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COLUMBINA VS. CHÆMEPELIA.

BY J. A. ALLEN.

THE case of *Columbina* versus *Chæmepelia* presents unusual conditions and is hence of interest beyond the determination of the types and proper status of these two genera.

The genus *Columbina* was founded by Spix in 1825 (Av. Bras., II, 57, 58, pll. lxxv, lxxv a). There was no diagnosis, and no type was indicated, but four species were referred to it, as follows:

Columbina strepitans, p. 57, pl. lxxv, fig. 1 (= *Columba picui* Temm. 1813); type of *Columbula* Bonap., Consp., II, 1854, 80, by subsequent designation (Gray, 1855).

Columbina campestris, p. 57, pl. lxxv, fig. 2; monotypic type of *Uropelia* Bonap., Consp., II, 1854, 85.

Columbina cabocolo, p. 58, pl. lxxv a, fig. 1 (= *talpacoti* Temm., 1813); type of *Talpacotia* Bonap., Consp., II, 1854, 79, by tautonymy and by subsequent designation (Gray, 1855).

Columbina griseola, p. 58, pl. lxxv a, fig. 2 (< *passerina* Linn., 1766); virtually type of *Chæmepelia* (Swains. 1827) by subsequent designation (Gray, 1840).

Thus in 1854 and 1855 the first three of these four species became types of other genera, leaving only *Columbina griseola*, equal to (or part of) *Columba passerina* Linn., as this species was at that time recognized, the habitat as originally assigned to *passerina* being "America inter tropicos." But before *Columbina* was dismembered by Bonaparte in 1854, *Columba passerina* had already been designated as the type of *Columbina* by Gray (List Gen. Bds., 1840, p. 58).

As *Columbina* meets all the requirements of a properly founded genus, having been duly published, with several species definitely referred to it, and the name being not preoccupied, it must be recognized in nomenclature. All that was lacking from the first to make it a full-fledged and properly defined genus was the designation of a type, which was supplied by Gray, as already stated, in 1840. Whether his designation was a proper one or not will be considered later in the present paper.

The genus *Chæmepelia* was founded by Swainson in 1827 (Zool. Journ., III, Aug.-Nov., 1827, 361), but without designation of a

type, and with only two species referred to it, namely, *Columba passerina* Linn. and *Columba squamosa* Temm. In 1841 Gray (List Gen. Bds., 2d ed., 75) designated *Columba passerina* as its type, a species he had in the preceding year made the type of *Columbina*! The other species was referred by Bonaparte in 1854 (Consp., II, p. 85) to his new genus *Scardafella*, and later it became its type by subsequent designation (Gray, 1855, Cat. Gen. and Subgen. Bds., 100). Selby, in 1835 (Nat. Libr., Pigeons, 198), designated "*Columba Talpicoti* Temm." as the type of *Chæmepelia*, and Swainson, in 1837 (Class. Bds., 349), cited the same species, under a different name ("*Columba cinnamomina*. Spix, II, [pl.] 75a, f. 1" = *talpacoti* Temm.) as its 'example'; but both of these designations were invalid, as the species selected was not originally included in the genus. Hence after *squamosa* was removed in 1854, *passerina* was the only species left in the genus and it thus necessarily became the type of *Chæmepelia* by restriction. But if Gray's act making *passerina* the type of *Columbina*, in 1840, was valid, this would render *Chæmepelia* a synonym of *Columbina*.

The first step in the consideration of this question is to note the fact that *passerina* was not nominally one of the four species originally referred to the genus *Columbina*, but Spix did include in it a species — *griseola* — which is in reality only a slightly differentiated subspecies of *passerina*. Of this, as will be shown later, there can be no question. But the *griseola* of Bonaparte and of nearly all subsequent authors was not the *griseola* of Spix. This explains why "*griseola*" has been usually recognized as either a distinct species or as a synonym of *Columba minuta* Linn., and renders it necessary to consider the taxonomic history of not only *Columbina griseola* Spix but also of *Chæmepelia griseola* Bonap. and of *Columba minuta* Linn.

Columba minuta Linn. (Syst. Nat., ed. 12, 1776, 285) was based exclusively on the *Turtur parvus fuscus americanus* Brisson (Orn., I, 1760, 116, pl. viii, fig. 2), which was poorly figured but exceedingly well described, as is attested by the rulings of modern authorities (see especially Salvadori, Brit. Mus. Cat. Bds., XXI, 1893, 481). Bonaparte, who is responsible for much that is unfortunate in ornithological nomenclature, was the first author to refer (Consp., II, 1854, 77, 78) *C. minuta* Linn. to *C. passerina* Linn., as the young of the

latter, and to refer "*C. minuta* Temm. nec Linn" to *Columbina griseola* Spix,— a wholly erroneous proceeding, by which he supplanted the well-founded *minuta* Linn. by a wholly new *griseola* Bonap. (nec Spix); for *griseola* Spix = *passerina* Linn., and *griseola* Bonap. = *minuta* Linn. Yet Bonaparte was followed in this false step by most later ornithologists, down to and including both Salvadori (1893) and Sharpe (1899). Berlepsch, however, in 1887 (Journ. f. Orn., 1887, 34), correctly identified *Columbina griseola* Spix with *Columba passerina* Linn., and this identification was emphatically confirmed by Hellmayr (Revision der Spix'schen Typen brasilianischer Vögel¹) in 1906, on the basis of an examination of Spix's original type of *griseola*, which proves to have been a young female of *passerina*, as can be readily seen by comparing such a specimen with Spix's diagnosis and plate; *passerina* being here taken in the broad sense in which it was recognized by all authors before the modern practice of recognizing slight geographic forms came into vogue. Indeed, it is only necessary to compare young or female examples of both *passerina* and *minuta* with Spix's figure and description to become convinced that Spix's *griseola* cannot be *minuta*. The wonder is, first, how Bonaparte could have made such a palpable error, and, secondly, that it could have been so long and so generally perpetuated. Linnæus, as already said, based his *Columba minuta*, fortunately, exclusively on Brisson (*l. c.*), and Brisson so well described the bird that its identity is beyond question; for the two species, *minuta* and *passerina*, are widely different at all ages. Bonaparte's *griseola* is also fully described, and is obviously the *minuta* of Linnæus, and not, as he mistakenly assumed it to be, the *griseola* of Spix. The only authors who have apparently looked up the matter for themselves, and have thus discovered the error, are Berlepsch and Hellmayr, as already stated. The case is simply one of the many instances where one author has blindly followed another, like a flock of sheep following their leader, and not a case "where doctors disagree," since *griseola* of Spix is perfectly determinable.

It is further worthy of note that Bonaparte placed *minuta* Linn. in his section "*pectore nigro undulato*" of his genus *Chamæpelia*, and *minuta* Temm. & Knip in his section "*pectore immaculato*" of the same genus, notwithstanding that Brisson's description (the sole

¹ Abhandl. d. II Kl. d. K. Akad. d. Wiss., XXII, Abt. iii, 697.

basis of *minuta* Linn.) indicates a bird with an unspotted breast, and gives other characters that absolutely exclude its reference to *passerina*. At the same time he placed *griseola* of Spix, a bird *with a spotted breast*, as shown by both Spix's figure and his diagnosis ('plumis capitis pectorisque squamosis'), with his own *griseola*, (described as "subtus roseo-vinacea, pectore puro") in the section "pectore immaculato"!

Now as to the summing up of the matter. The range of *Columba passerina* Linn., 1758, as originally given, included all of the warmer parts of America, and "Picuipinima, Marcgr. bras. 204," was one of the original references. Salvadori, in 1893 (*l. c.*, 477), gave the range as "South Atlantic and Gulf States, Texas, New Mexico, Arizona, and California, south to the West Indies, and through Central America to South America, as far as Peru and Paraguay." He recognized no subspecies of it, nor any closely allied forms, and after stating that he had examined a large amount of material from a great number of localities (he lists nearly 200 specimens as being contained in the British Museum, and refers to types of alleged species and other material examined elsewhere), he says: "...I have arrived at the conclusion that there is only one species," which, he goes on to say, varies more or less according to different conditions of environment. Without having seen the type of *griseola* Spix, he placed this name under *minuta*, evidently following previous authors without careful verification of the case.

This digression is to show that the status of *griseola* was that of a synonym of *passerina* till the *passerina* group began to be recognized as an aggregation of subspecies, of which *griseola* is one. It was not till Bonaparte redescribed *griseola* in 1854 that the name figured to any extent in ornithological literature. Subsequently it was used as a substitute name for *minuta* Linn., and was generally incorrectly ascribed to Spix, as was done by Gray in 1856, in his Catalogue of Pigeons (Cat. Bds. Brit. Mus., pt. IV, 1856, 50), where he adopted Bonaparte's genera of 1854 and his wrong determination of *Columbina griseola* Spix.

We return now to the question, What shall we do with *Columbina*? To recapitulate: Gray in 1840 recognized it as a genus, with *Columba passerina* Linn. as the type, and *Chamepelia* Swains. as a synonym of it. While *C. passerina* was not one of the originally included

species, so far as the name itself is concerned, his *Columbina griseola* was really only a new name for *passerina*, as *passerina* was understood down to 1854, or for 29 years later, and at best represents only a slight geographic form of true *passerina* as at present restricted. A year later Gray recognized both *Columbina* and *Chæmepelia* as distinct genera, with *Columbina streptans* Spix as the type of *Columbina* and *Columba passerina* as the type of *Chæmepelia*, *streptans* being only *Columba picui* of Temminck renamed.

In 1854 Bonaparte retained *Chæmepelia* (emending the name to *Chamæpelia*) and proposed three other genera based wholly or in part on species originally included in *Columbina*, namely: *Talpacotia*, to include *C. cabocolo* Spix (which is *talpacoti* Temm. renamed); *Columbula*, based solely on *C. strepitans* Spix, to which he referred *Columbina* Spix as a synonym; and *Uropelia*, with *C. campestris* Spix as its sole species. *Talpacotia* is now currently treated as a synonym of *Chæmepelia*; *Columbula* is at present currently recognized as a monotypic genus, to which *Columbina* is still referred as a synonym; *Uropelia* is also still monotypic, and universally recognized. It thus happens that the four original species of *Columbina* are now dispersed among three universally recognized genera, all founded later than *Columbina* (*Chæmepelia*, 1827; *Columbula*, 1854; *Uropelia*, 1854), while *Columbina*, without adequate reason, has been retired from modern nomenclature.

The International Code of Zoölogical Nomenclature (Article 30, rule *d*) provides that "If a genus, without originally designated or indicated type, contains among the original species one possessing the generic name as its *specific* or *subspecific* name, either as *valid* name or *synonym*, that *species* or *subspecies* becomes *ipso facto* type of the genus." By a parallel ruling on the equal availability of species and subspecies as types of genera, the proper type of *Columbina* would be *Columba passerina* Linn. subsp. *griseola* Spix, under the trinomial refinement of modern nomenclature. *Columbina* would replace *Chæmepelia*, and *Columbula* would be left undisturbed. If *Columbina griseola* be thrown out as not available as type of *Columbina*, and Gray's second type designations for *Chæmepelia* and *Columbina* be recognized as valid, then *strepitans* would be type of *Columbina*, *Columbina* would replace *Columbula*, and *passerina* would be the type of *Chæmepelia*. But does the law of priority permit us to ignore Gray's first type designations for these two genera?

I see no reason why *Columbina griseola* Spix = *Columbina passerina griseola* (Spix), may not be properly taken as the type of *Columbina*, in accordance with rule *d* of Art. 30 of the International Code respecting the equal availability of species and subspecies as types. In the latter case the basis is type by tautonymy, in the former type by subsequent designation, where a subspecies of the species that became type by subsequent designation was the originally included form. The A. O. U. Committee on Nomenclature, however, in considering the case of *Columbina*, thought that a principle was here involved which might affect other cases, and deemed it best to refer the matter to the International Zoölogical Commission for decision — a step I heartily approve, and therefore respectfully offer the foregoing exposition as a brief on the chief points at issue.

THE DESTRUCTION OF WHISTLING SWANS (*OLOR COLUMBIANUS*) AT NIAGARA FALLS.

BY JAMES H. FLEMING.

DISASTERS that so often overtake migrating birds are seldom matters of newspaper interest, but in the present case the birds were so conspicuous and the circumstances so unusual that public interest was aroused by the account in the Buffalo papers of March 17, 1908, of a slaughter of wild swans that took place at Niagara Falls on the 15th. It was stated that 128 birds were taken out of a flock that had been swept over the Falls, and the names of several men who had made the largest bags were given. I was able to get confirmation of the story from Mr. J. S. Wallace who was in touch with friends at Niagara, and on receiving two swans and more details on the 19th, Mr. Wallace and I decided to go to Niagara Falls and get the story at first hand, and the following is as nearly a correct account as it was possible to get.

On the morning of March 14, 1908, a flock of three or four hundred swans lit in the Upper Niagara River below Grand Island